

107TH CONGRESS  
1ST SESSION

**Calendar No.**

**S.**

To provide for the energy security of the Nation, and for other purposes.

IN THE SENATE OF THE UNITED STATES

DECEMBER \_\_\_, 2001

Mr. DASCHLE (for himself and Mr. BINGAMAN) introduced the following bill; which was read the first time

DECEMBER \_\_\_, 2001

Read the second time and placed on the calendar

## **A BILL**

To provide for the energy security of the Nation, and for other purposes.

1           *Be it enacted by the Senate and House of Representatives of the United States of America*  
2           *in Congress assembled,*

3           **SECTION 1. SHORT TITLE.**

4           This Act may be cited as the “Energy Policy Act of 2002”.

5           **SEC. 2. TABLE OF CONTENTS.**

### **SEC. 1213. NEXT GENERATION LIGHTING INITIATIVE.**

(a) ESTABLISHMENT.— There is established in the Department a Next Generation Lighting Initiative to research, develop, and conduct demonstration activities on advanced solid-state lighting technologies based on white light emitting diodes.

(b) OBJECTIVES.—

(1) IN GENERAL.— The objectives of the initiative shall be to develop, by 2011, advanced solid-state lighting technologies based on white light emitting diodes that, compared to incandescent and fluorescent lighting technologies, are—

- (A) longer lasting;
- (B) more energy\_efficient; and
- (C) cost\_competitive.

(2) INORGANIC WHITE LIGHT EMITTING DIODE.— The objective of the initiative with respect to inorganic white light emitting diodes shall be to develop an inorganic white light emitting diode that has an efficiency of 160 lumens per watt and a 10\_year lifetime.

(3) ORGANIC WHITE LIGHT EMITTING DIODE.— The objective of the initiative with respect to organic white light emitting diodes shall be to develop an organic white light emitting diode with an efficiency of 100 lumens per watt with a 5\_year lifetime that—

- (A) illuminates over a full color spectrum;
- (B) covers large areas over flexible surfaces; and

(C) does not contain harmful pollutants typical of fluorescent lamps such as mercury.

(c) CONSORTIUM.—

(1) IN GENERAL.— The Secretary shall initiate and manage basic and manufacturing-related research on advanced solid-state lighting technologies based on white light emitting diodes for the initiative, in cooperation with the Next Generation Lighting Initiative Consortium.

(2) COMPOSITION.— The consortium shall be composed of firms, national laboratories, and other entities so that the consortium is representative of the United States solid state lighting research, development, and manufacturing expertise as a whole.

(3) FUNDING.— The consortium shall be funded by—

(A) participation fees; and

(B) grants provided under subsection (e)(1).

(4) ELIGIBILITY.— To be eligible to receive a grant under subsection (e)(1), the consortium shall—

(A) enter into a consortium participation agreement that--

(i) is agreed to by all participants; and

(ii) describes the responsibilities of participants, participation fees, and the scope of research activities; and

(B) develop an annual program plan.

(5) INTELLECTUAL PROPERTY.— Participants in the consortium shall have royalty-free nonexclusive rights to use intellectual property derived from consortium research conducted under subsection (e)(1).

(d) PLANNING BOARD.—

(1) IN GENERAL.—Not later than 90 days after the establishment of the consortium, the Secretary shall establish and appoint the members of a planning board, to be known as the “Next Generation Lighting Initiative Planning Board”, to assist the Secretary in carrying out this section.

(2) COMPOSITION.— The planning board shall be composed of—

(A) 4 members from universities, national laboratories, and other individuals with expertise in advanced solid-state lighting and technologies based on white light emitting diodes; and

(B) 3 members from a list of not less than 6 nominees from industry submitted by the consortium.

(3) STUDY.—

(A) IN GENERAL.— Not later than 90 days after the date on which the Secretary appoints members to the planning board, the planning board shall complete a study on strategies for the development and implementation of advanced solid-state lighting technologies based on white light emitting diodes.

(B) REQUIREMENTS.— The study shall develop a comprehensive strategy to implement, through the initiative, the use of white light emitting diodes to increase energy efficiency and enhance United States competitiveness.

(C) IMPLEMENTATION.— As soon as practicable after the study is submitted to the Secretary, the Secretary shall implement the initiative in accordance with the recommendations of the planning board.

(4) TERMINATION.—The planning board shall terminate upon completion of the study under paragraph (3).

(e) GRANTS.—

(1) FUNDAMENTAL RESEARCH.— The Secretary, through the consortium, shall make grants to conduct basic and manufacturing-related research related to advanced solid-state lighting technologies based on white light emitting diode technologies.

(2) TECHNOLOGY DEVELOPMENT AND DEMONSTRATION.—The Secretary shall enter into grants, contracts, and cooperative agreements to conduct or promote technology research, development, or demonstration activities. In providing funding under this paragraph, the Secretary shall give preference to participants in the consortium.

(3) CONTINUING ASSESSMENT.—The consortium, in collaboration with the Secretary, shall formulate annual operating and performance objectives, develop technology roadmaps, and recommend research and development priorities for the initiative. The Secretary may also establish or utilize advisory committees, or enter into appropriate arrangements with the National Academy of Sciences, to conduct periodic reviews of the initiative. The Secretary shall consider the results of such assessment and review activities in making funding decisions under paragraphs (1) and (2) of this subsection.

(4) TECHNICAL ASSISTANCE.— The National Laboratories shall cooperate with and provide technical assistance to persons carrying out projects under the initiative.

(5) AUDITS.—

(A) IN GENERAL.— The Secretary shall retain an independent, commercial auditor to determine the extent to which funds made available under this section have been expended in a manner that is consistent with the objectives under subsection (b) and, in the case of funds made available to the consortium, the annual program plan of the consortium under subsection (c)(4)(B).

(B) REPORTS.— The auditor shall submit to Congress, the Secretary, and the Comptroller General of the United States an annual report containing the results of the audit.

(6) APPLICABLE LAW.—Grants, contracts, and cooperative agreements under this section shall not be subject to the Federal Acquisition Regulation.

(f) PROTECTION OF INFORMATION.— Information obtained by the Federal Government on a confidential basis under this section shall be considered to constitute trade secrets and commercial or financial information obtained from a person and privileged or confidential under section 552(b)(4) of title 5, United States Code.

(g) AUTHORIZATION OF APPROPRIATIONS.— In addition to amounts authorized under section 1211(c), there are authorized to be appropriated for activities under this section \$50,000,000 for each of fiscal years 2003 through 2011.

(h) DEFINITIONS.—In this section:

(1) ADVANCED SOLID-STATE LIGHTING.— The term “advanced solid-state lighting” means a semiconducting device package and delivery system that produces white light using externally applied voltage.

(2) CONSORTIUM.—The term “consortium” means the Next Generation Lighting Initiative Consortium under subsection (c).

(3) INITIATIVE.—The term “initiative” means the Next Generation Lighting Initiative established under subsection (a).

(4) INORGANIC WHITE LIGHT EMITTING DIODE.—The term “inorganic white light emitting diode” means an inorganic semiconducting package that produces white light using externally applied voltage.

(5) ORGANIC WHITE LIGHT EMITTING DIODE.—The term “organic white light emitting diode” means an organic semiconducting compound that produces white light using externally applied voltage.

(6) WHITE LIGHT EMITTING DIODE.— The term “white light emitting diode” means—

(A) an inorganic white light emitting diode; or

(B) an organic white light emitting diode.